

SENIOR DESIGN **FINALIST SPR '10**



Standing left to right: Patrick Sugar, Jared Trammell Sears, Craig Tovey, Stephen Spicher, and Kristen Vila. Seated left to right: Jennifer LaPerre and Matthew Powers.

STUDENT TEAM:

Jennifer LaPerre, Matthew Powers, Jared Trammell Sears, Stephen Spicher, Patrick Sugar, and Kristen Vila

FACULTY ADVISOR:

Craig Tovey

PROJECT TITLE:

Process Improvement of Burger King® Restaurant Operations

PROJECT SUMMARY:

Our team addressed three areas of improvement for Burger King®: determining the optimal number of point-of-sale units, eliminating excessive labor hours, and reducing wait times in the drive-thru. We developed the following three project deliverables: a stochastic model, a labor scheduling integer program, and a series of simulations. These resulted in a potential cost savings of over \$6M annually.